## **EAST Search History**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	186	257/223,445,230,e27.139,e27.145,e27.162.ccls. and @ad<"20021018" and (shift\$3 near2 register)	US- PGPUB; USPAT	OR	ON	2009/04/15 10:52
2	16	257/183.1,215,226,238,242,251,e31.075,e21.456,e31.078,e31.081, e31.084,e27.082,e27.083,e27.15,e27.158,e29.058,e29.065, e29.138,e29.227,e29.228,e21.183,e21.185,e21.187,e21.189, e21.617,912.ccls. and @ad<"20021018" and (shift\$3 near2 register) and output same (high or heavily) near3 (doped or dopant or impurity)	US- PGPUB; USPAT	OR	ON	2009/04/15 11:42
L3	1	257/183.1,215,226,238,242,251,e31.075,e21.456,e31.078,e31.081,e31.084,e27.082,e27.083,e27.15,e27.158,e29.058,e29.065,e29.138,e29.227,e29.228,e21.183,e21.185,e21.187,e21.189,e21.617,912.ccls. and @ad<"20021018" and (shift\$3 near2 register) and (read adj out or readout) same (high or heavily) near3 (doped or dopant or impurity)	US- PGPUB; USPAT	OR	ON	2009/04/15 11:45
L4	24	@ad<"20021018" and (shift\$3 near2 register) and (read adj out or readout) same (high or heavily) near3 (doped or dopant or impurity)	US- PGPUB; USPAT	OR	ON	2009/04/15 11:45
L5	23	14 not l2	US- PGPUB; USPAT	OR	ON	2009/04/15 11:45
L6	19	15 not 11	US- PGPUB; USPAT	OR	ON	2009/04/15 11:45
L7	22	257/183.1,215,226,238,242,251,e31.075,e21.456,e31.078,e31.081, e31.084,e27.082,e27.083,e27.15,e27.158,e29.058,e29.065, e29.138,e29.227,e29.228,e21.183,e21.185,e21.187,e21.189, e21.617,912.ccls. and @ad<"20021018" and (shift\$3 near2 register) and output with ("n+" or "N+" or "p+" or "P+")	US- PGPUB; USPAT	OR	ON	2009/04/15 11:49

L8	4	(okada-yoshihiro or otsuru-yuzo).in. and (image and (doped or dopant or impurity) with (high\$2 or heavily)).clm.	US- PGPUB; USPAT	OR	ON	2009/04/15
L9	360	(image and (doped or dopant or impurity) with (high\$2 or heavily)). clm.	US-PGPUB	OR	ON	2009/04/15 11:55
L10	8	(image and (doped or dopant or impurity) with (high\$2 or heavily) and (shift\$3 near3 register)).clm.	US-PGPUB	OR	ON	2009/04/15 11:56
L11	7	(image and (concentration) with (high\$2 or heavily) and (shift\$3 near3 register)).clm.	US-PGPUB	OR	ON	2009/04/15 11:57
S1	0	("7075128").URPN.	USPAT	OR	OFF	2007/09/06 17:09
\$2	2	"0499275"	USPAT; EPO	OR	OFF	2007/09/06 17:10
S3	1	"0499275".pn.	USPAT; EPO	OR	OFF	2007/09/06 17:11
S4	2	("0499275").PN.	USPAT; USOCR	OR	OFF	2007/09/06 17:11
S5	0	EP0499275	USPAT	OR	OFF	2007/09/06 17:12
S6	0	EP0499275	USPAT; EPO	OR	OFF	2007/09/06 17:12
S8	0	ep0499275.pn.	USPAT; EPO	OR	OFF	2007/09/06 17:14
S9	0	("2005/0280724").URPN.	USPAT	OR	OFF	2007/09/06 17:42
S10	16	257/219,218,220,221,223,224,225,229,230,241- 243,61,101,269,285,549,609,610,612,e29.053.ccls. and ((dop\$3 near4 high\$2) with output)	USPAT	OR	OFF	2007/09/06 18:43
S11	5	("4074302"   "4984045"   "5223725"   "5229630"   "5357128").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/09/06 17:53

S12	5	("4074302"   "4984045"   "5223725"   "5229630"   "5357128").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/09/06 18:36
S13	3	("3918070"   "4074302"   "4672645").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/09/06 18:39
S14	103	257/219,218,220,221,223,224,225,229,230,241- 243,61,101,269,285,549,609,610,612,e29.053.cds. and ((dop\$3 near4 high\$2) and register)	USPAT	OR	OFF	2007/09/06 18:43
S15	9	257/219,218,220,221,223,224,225,229,230,241- 243,61,101,269,285,549,609,610,612,e29.053.cds. and ((dop\$3 near4 high\$2) and horizontal adj register)	USPAT	OR	OFF	2007/09/06 18:43
S16	28	257/219,218,220,221,223,224,225,229,230,241- 243,61,101,269,285,549,609,610,612,e29.053.cds. and ((dop\$3 near4 high\$2) and horizontal adj3 register)	USPAT	OR	OFF	2007/09/06 18:44
S17	896	(doping or doped or dopant) with output with high\$2	USPAT	OR	OFF	2007/10/05 13:58
S18	256	(doping or doped or dopant) near6 output near6 high\$2	USPAT	OR	OFF	2007/10/05 13:59
S19	0	(doping or doped or dopant) near6 output near6 high\$2 with register	USPAT	OR	OFF	2007/10/05 14:00
S20	7	(doping or doped or dopant) near6 output near6 high\$2 and register	USPAT	OR	OFF	2007/10/05 14:38
S21	89	(doping or doped or dopant) near6 high\$2 and register near4 horizontal and register near4 vertical	USPAT	OR	OFF	2007/10/05 14:39
S22	162	(doping or doped or dopant) near6 high\$2 and register near4 (horizontal or serial) and register near4 (vertical or parallel)	USPAT	OR	OFF	2007/10/05 14:40
S23	13	(doping or doped or dopant) near6 high\$2 and register near4 (horizontal or serial) and register near4 (vertical or parallel) and (charge with (discharg\$3 or leak\$3) with substrate)	USPAT	OR	OFF	2007/10/05 15:11
S24	262	(doping or doped or dopant or impurity) near6 high\$2 and register near4 (horizontal or serial) and register near4 (vertical or parallel)	USPAT	OR	OFF	2007/10/09 10:06

<b>S</b> 25	8	("4665422"   "5841126"   "5854100"   "5977576"   "5986297"   "6023293"   "6184055"   "6403998").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/05 15:31
S26	7	("4142200"   "4160985"   "4247862"   "4348690"   "5245203"   "5898195"   "5898196").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/05 16:53
\$27	8	("4087832"   "4276099"   "4987466"   "5196719"   "5220185"   "5323034"   "5589698"   "5770870").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/05 18:06
S28	6	("4987466"   "5196719"   "5220185"   "5323034"   "5589698"   "5770870").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/05 18:19
S29	5	("6114717").URPN.	USPAT	OR	OFF	2007/10/05 18:20
S30	29	output with undesir\$4 with charge with (flow or leakage or (punch adj through or punch-through))	USPAT	OR	OFF	2007/10/09 10:42
S31	1	output with undesir\$4 with charge with (flow or leakage or (punch adj through or punch-through)) and solid near3 image	USPAT	OR	OFF	2007/10/09 10:42
S32	3	output with undesir\$4 with charge with (flow or leakage or (punch adj through or punch-through)) and CCD	USPAT	OR	OFF	2007/10/09 10:57
S33	218	output with charge with (flow or leakage or (punch adj through or punch-through)) and CCD	USPAT	OR	OFF	2007/10/09 10:58
S34	35	output with prevent\$3 with charge with (flow\$3 or leakage or leak \$3 or (punch adj through or punch-through)) and CCD	USPAT	OR	OFF	2007/10/09 11:43
S35	56	output with power with sav\$3 and (flow\$3 or leakage or leak\$3 or (punch adj through or punch-through)) and CCD	USPAT	OR	OFF	2007/10/09 11:47
S36	2	(output with power with sav\$3).ab. and (flow\$3 or leakage or leak \$3 or (punch adj through or punch-through)) and CCD	USPAT	OR	OFF	2007/10/09 11:49
S37	20	(output with power with low\$3).ab. and (flow\$3 or leakage or leak \$3 or (punch adj through or punch-through)) and CCD	USPAT	OR	OFF	2007/10/09 11:50

S38	112	(power near3 low\$3).ab. and (flow\$3 or leakage or leak\$3 or (punch adj through or punch-through)) and CCD	USPAT	OR	OFF	2007/10/09 11:59
S39	53	output with high\$2 near3 (dop\$3 or impurity) and CCD	USPAT	OR	OFF	2007/10/09 12:00
S40	30	257/414,431,432,443,446.ccls. and ((impurity or dop\$3) with (leak \$3 with (current or charge)))	USPAT; EPO	OR	OFF	2007/10/09 14:48
S41	1	"6724060".pn.	USPAT; EPO	OR	OFF	2007/10/09 14:48
S42	4	("4567524"   "4774586"   "4985758"   "4987466").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 16:09
S43	6	("5283450").URPN.	USPAT	OR	OFF	2007/10/10 16:27
S44	1	("4939560").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 16:47
S45	7	("5220185").URPN.	USPAT	OR	OFF	2007/10/10 16:51
S46	15	("4242692"   "4589005"   "4688066"   "4728622"   "4839911"   "4949183"   "4993053"   "5175602"   "5192990"   "5220185"   "5227650"   "5239192"   "5286989"   "5294817"   "5309005").PN.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 18:08
S47	1	"5220185".pn.	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 19:03
S48	0	257/414,431,432,443,446.ccls. and (doped or dopant or impurity) with (horizontal or serial) near4 register with (vertical or parallel) near4 register with pixel	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 19:05

<b>S</b> 49	0	257/414,431,432,443,446.ccls. and (doped or dopant or impurity) with (horizontal or serial) near4 register with (vertical or parallel) near4 register	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 19:05
S50	10	(doped or dopant or impurity) with (horizontal or serial) near4 register with (vertical or parallel) near4 register	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 19:18
S51	0	("2004/0119865").URPN.	USPAT	OR	OFF	2007/10/10 19:06
S52	12	(doped or dopant or impurity) with (horizontal or serial) near4 register and (doped or dopant or impurity)with (vertical or parallel) near4 register	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 19:21
S53	12	(doped or dopant or impurity) with (horizontal or serial) near4 register and (doped or dopant or impurity) with (vertical or parallel) near4 register	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 19:22
S54	8	(concentration) with (horizontal or serial) near4 register and (concentration) with (vertical or parallel) near4 register	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 19:31
S55	86	(concentration or impurity or doped or dopant or doping) with (horizontal or serial) near4 transfer and (concentration or impurity or doped or dopant or doping) with (vertical or parallel) near4 transfer	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 19:37
S56	64	(concentration or impurity or doped or dopant or doping) with (horizontal or serial) near4 transfer and (concentration or impurity or doped or dopant or doping) with (vertical or parallel) near4 transfer and (pixel or photodetector or PD)	US- PGPUB; USPAT; USOCR	OR	OFF	2007/10/10 19:38
S57	2	"20020039144"	US- PGPUB; USPAT	OR	OFF	2007/10/11 15:06
S58	3	(vertical and horizontal) near4 transfer with (formed or made) near3 (before or after)	US- PGPUB; USPAT	OR	OFF	2007/10/11 15:08

S59	0	(vertical and horizontal) near4 register with (formed or made) near3 (before or after)	US- PGPUB; USPAT	OR	OFF	2007/10/11 15:11
S60	44	(vertical and horizontal) near4 (register or transfer) with (making)	US- PGPUB; USPAT	OR	OFF	2007/10/11 15:14
S61	218	(vertical near4 (made or formed) near3 (before or after) with horizontal)	US- PGPUB; USPAT	OR	OFF	2007/10/11 15:17
S62	242	((vertical or parallel) near4 (made or formed) near3 (before or after) with (serial or horizontal))	US- PGPUB; USPAT	OR	OFF	2007/10/11 15:17
S63	0	((vertical or parallel) near4 (made or formed) near3 (before or after) with (serial or horizontal)) and image adj device	US- PGPUB; USPAT	OR	OFF	2007/10/11 15:18
S64	12	((vertical or parallel) near4 (made or formed) near3 (before or after) with (serial or horizontal)) and CCD	US- PGPUB; USPAT	OR	OFF	2007/10/11 15:18
S65	2	"20020039144"	US- PGPUB; USPAT	OR	ON	2008/03/10 12:35
S66	1	"5220185".pn.	US- PGPUB; USPAT	OR	ON	2008/03/10 12:59
S67	1	"6072206".pn.	US- PGPUB; USPAT	OR	ON	2008/03/10 14:32
S68	0	image adj sensor and "n.sup"	US- PGPUB; USPAT	OR	ON	2008/03/10 15:01
S69	0	image adj sensor and "n.sup." and horizontal and vertical	US- PGPUB; USPAT	OR	ON	2008/03/10 15:02

S71	15810	image adj sensor and horizontal and vertical	US- PGPUB; USPAT	OR	ON	2008/03/10 15:04
S72	0	"n.sup" with vertical near5 register	USPAT	OR	OFF	2008/03/11 13:04
S73	0	"n.sup." with vertical near5 register	USPAT	OR	OFF	2008/03/11 13:04
S74	0	"n.sup." with vertical	US- PGPUB; USPAT	OR	ON	2008/03/11 13:05
S75	90	"n.sup."	US- PGPUB; USPAT	OR	ON	2008/03/11 13:05
S76	90	"n.sup"	US- PGPUB; USPAT	OR	ON	2008/03/11 13:10
S77	90	" n.sup. "	US- PGPUB; USPAT	OR	ON	2008/03/11
S78	14393	n\$1sup\$3 adj4 type	US- PGPUB; USPAT	OR	ON	2008/03/11 13:14
S79	762	n\$1sup\$3 adj4 type with vertical	US- PGPUB; USPAT	OR	ON	2008/03/11 13:15
S80	12	n\$1sup\$3 adj4 type same vertical adj shift adj register	US- PGPUB; USPAT	OR	ON	2008/03/11 13:16
S81	10	("4477962"   "4746961"   "4838654"   "5218232"   "5288527"   "5308779"   "5412240"   "5434441"   "5471330"   "5644370").PN.	US- PGPUB; USPAT; USOCR	OR	ON	2008/03/11 13:19

S82	3	("4652925"   "4707744"   "4752829").PN.	US- PGPUB; USPAT; USOCR	OR	ON	2008/03/11 13:27
S83	14	n\$1sup\$3 adj4 type same vertical adj shift	US- PGPUB; USPAT	OR	ON	2008/03/11 13:40
S84	1	"5220185".pn.	US- PGPUB; USPAT	OR	ON	2008/03/11 16:09
S85	1	"5898195".pn.	US- PGPUB; USPAT	OR	ON	2008/03/11 17:33
S86	396	257/239,220.ccls. and @ad<"20021018"	US- PGPUB; USPAT	OR	ON	2008/09/05 12:40
S87	1	("5063581").PN.	US- PGPUB; USPAT; USOCR	OR	ON	2008/09/05 18:17
S88	8	("5323034").URPN.	USPAT	OR	ON	2008/09/05 18:22

## 4/15/2009 12:06:04 PM

 $\textbf{C:} \ \textbf{Documents and Settings} \\ \ \textbf{fyeunglopez} \\ \ \textbf{My Documents} \\ \ \textbf{EAST} \\ \ \textbf{Workspaces} \\ \ \textbf{10688073.wsp} \\$